

Watershed Analysis Summary

Old Fairview

Landscape Analysis Unit

Roseburg District BLM

Updated as of

July 21, 1994

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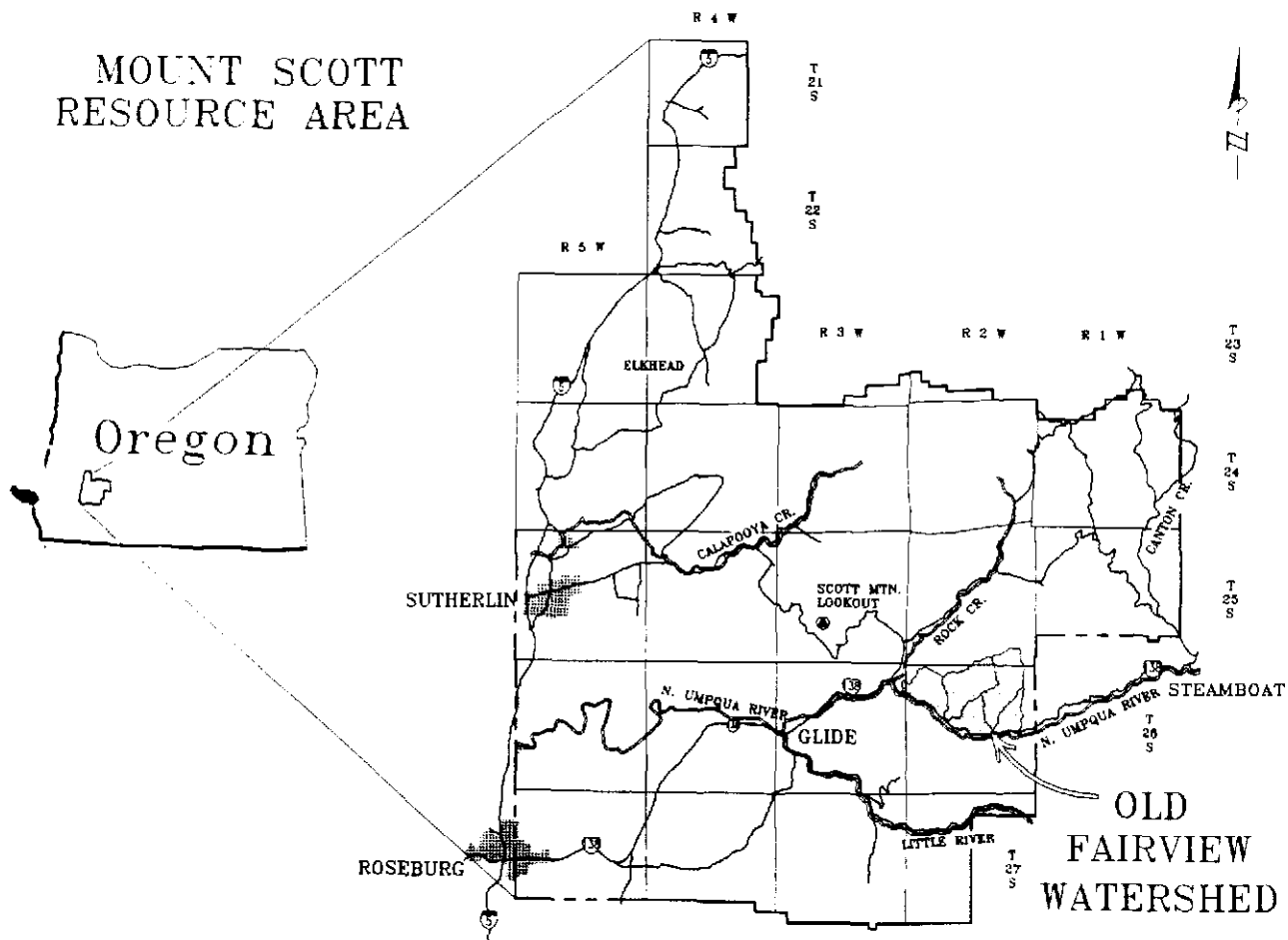
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OLD FAIRVIEW WATERSHED

Landscape Analysis Unit (LAU)



DESCRIPTION: 1 of 9 LAU's in the Lower North Umpqua Analytical Watershed

SIZE: 11,598 acres

By Ownership:

BLM 6,040 acres (52%)

Private 5,558 acres (48%)

Old Fairview Watershed Analysis Summary

I. INTRODUCTION

The purpose of watershed analysis is to improve our understanding of the processes and interactions of the watershed and of the forest system as a whole. Existing information about the conditions of vegetation, wildlife, fish, streams, soils, roads, fire history, cultural sites, plants, and recreation use have been gathered for the Old Fairview Landscape Analysis Unit (LAU). This is the first attempt to analyze how these various resources interact and affect each other.

A. Central Issues Considered In This Watershed

Throughout the process information was gathered about specific topics such as sensitive plants or cultural sites. Some of the information or topics were not included as part of this analysis because they were not considered as major influences of the watershed processes. This extra information could still be used for analysis to raise concerns on project by project basis. The major management issues or concerns for Old Fairview include the following:

1. Special Status Species (Animals)
2. Fisheries/ Water Quality
3. Socio-Economic Issues
4. Noxious Weeds

The description of current conditions and desired future conditions were built around these concerns.

B. Area Description

Old Fairview LAU, located approximately six miles east of Glide, makes up an area of approximately 11,600 acres. The North Umpqua River and state highway 138 constitute it's southern boundary. Old Fairview is divided into 5 sub-watersheds or compartments: Clay/Hill, Honey, Hogback, Susan and Cole creeks. The slopes of the landscape generally have a southerly exposure. Elevations range from approximately 800 to 4,600 feet. Annual precipitation averages 54 inches and comes mostly during the winter months in the form of rain with a seasonal snowpack on elevations greater than 4,000 feet. Douglas-fir is the dominant tree species over the landscape. Grand fir, Western Hemlock and Western Red Cedar are common associates.

Ownership within the watershed includes the following:

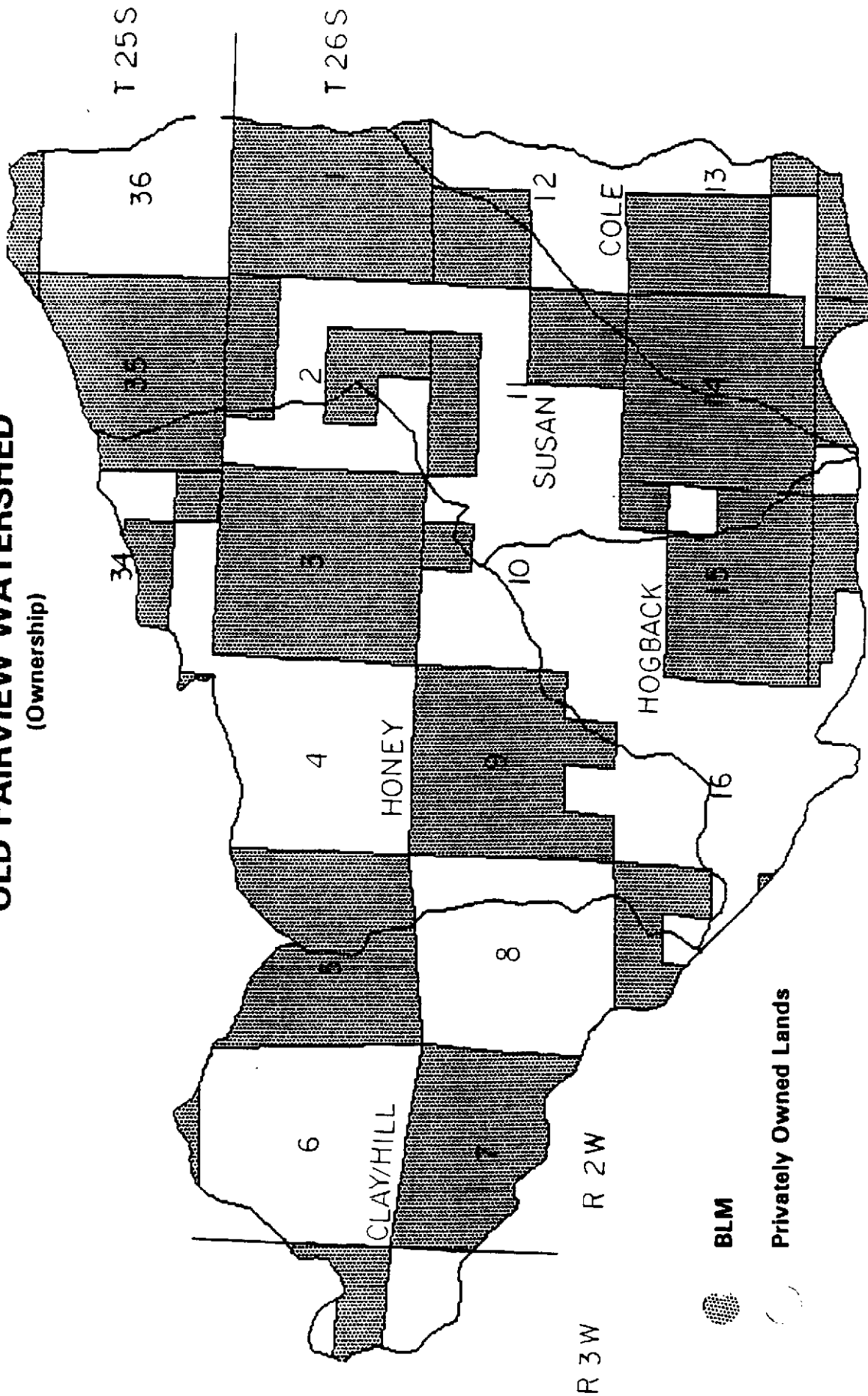
Government (BLM) 52%	(See the following figure and
Industrial/Larger Landowner 32%	} table WO.T1 for greater detail)
Small Private Landowners 16%	

The small private landowners are located mostly along the North Umpqua River. Except for several dwellings of small private landowners, most of the watershed is forest type land. The North Umpqua river attracts a wide variety of recreational use.

C. Land Use Allocations

The Record of Decision (ROD) for Amendments to Forest Service and BLM Planning Documents Within the Range of the Northern Spotted Owl designates public lands within Old Fairview into the following 3 categories:

OLD FAIRVIEW WATERSHED (Ownership)



OLD FAIRVIEW WATERSHED (Ownership by acres & %)

	Total Watershed		SUB-WATERSHEDS									
	Acres	% of Total	Clay Hill		Honey Creek		Hog Back		Susan Creek		Cole Creek	
	Acres	% of Total	Acres	% of Total	Acres	% of Total	Acres	% of Total	Acres	% of Total	Acres	% of Total
BLM	6040	52%	936	43%	1812	54%	539	35%	1969	60%	783	62%
PRIVATE	5558	48%	1263	57%	1527	46%	990	65%	1303	40%	477	38%
(Breakdown of private)												
Weyerhaeuser	1440	12%	920	42%	60	2%	0	0%	460	14%	0	0%
Seneca	780	7%	0	0%	680	20%	100	7%	0	0%	0	0%
Roseburg Resources	680	6%	40	2%	270	8%	0	0%	370	11%	0	0%
Lone Rock	350	3%	0	0%	50	1%	0	0%	0	0%	300	24%
Gardner	400	3%	80	4%	110	3%	210	14%	0	0%	0	0%
All Others	1908	16%	223	10%	357	11%	680	44%	473	14%	177	14%
TOTAL	11598		2199		3339		1529		3272		1260	

	<u>Acres. Fed Lands</u>	<u>% Fed Lands</u>
-North Umpqua Wild and Scenic River	1242 ac	20%
-Riparian, Threatened & Endangered Animal, & other reserves	2103 ac	35%
-Matrix (Timber Producing Lands)	2695 ac	45%

The Matrix lands can be further broken down into 2 different categories that have different management objectives: Connectivity (managed to leave 12 to 18 trees per acre, and harvested on a 150 year rotation) and General Forest Management Areas (GFMA is managed to leave 6 to 8 trees per acre) The following figure shows a representation of these different categories.

II. HISTORICAL BACKGROUND

A. Influences to Vegetative Change

A brief look at the cultural history as well as laws and regulations over the past 200 years will help explain the current vegetative patterns. Of what is known about the native Americans who lived in this area there is ample evidence that they used fire to modify the landscape. Fire was used for hunting, maintenance of small meadows and collection of foods such as hazelnuts, acorns, berries, and root crops. (Agee, J.K. "Fire Ecology of Pacific Northwest Forests", Island Press, Covelo, CA, 1993)

A series of laws between 1850 and 1878 (Donation Land Law, Homestead Law and Timber and Stove Law) encouraged the settlement of Indian lands and extraction of timber. To encourage a railroad connecting Oregon and California for lumber trade, the Oregon & California (O&C) Act was passed in 1869. The alternating sections of land within 30 miles of the railroad were given to the railroad company as the incentive to complete the Oregon segment. The company did not carry out the terms of the act however. The lands were then surveyed and the timber cruised for resale. The alternating public and private ownership probably helped create some of the greatest changes to the landscape.

Little is known about the vegetation type of past history in this watershed. Figure F.F1 from a 1914 fire typing project, possibly from the O&C resale surveys, shows 67% of Old Fairview Watershed burned over. The surveys showed seedling counts at low levels. From preliminary studies, fire tended to occur in the watershed every 15 to 20 years. Fire suppression received greater emphasis in the early 1930's. Understory vegetation probably increased to levels higher than what occurred historically because of this and may have increased the chance of catastrophic fires.

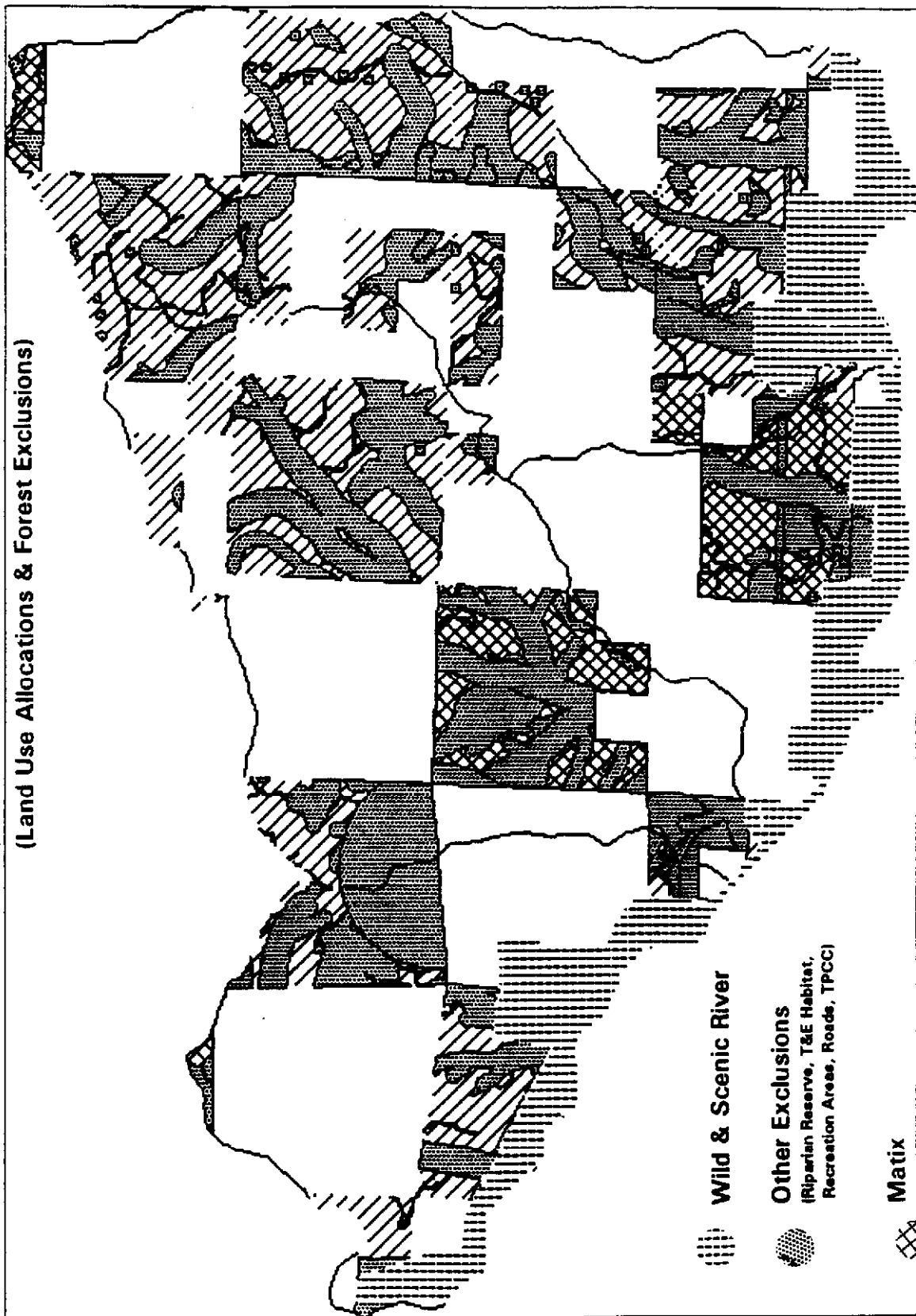
Logging has increased since 1940. The most valuable timber was cleared and converted to wood products. Logging in much of Old Fairview has taken place on private lands since 1954 and on federal lands since 1970.

B. Current Vegetative Conditions

In a general sense the forests on the upper slopes are younger more homogenous stands of Douglas-fir while the lower elevations are older and more diverse stands of Douglas-fir, pine, cedar, hemlock and Grand fir. As can be seen by the surveys of 1914 (F.F1), manmade or lightning caused fire probably had a major role in this condition. With the drier conditions of the south facing slopes, lightning started fires at midslope would generate more heat on the upper slopes thus killing more of the vegetation. These fires would create more of an underburn effect on the lower slopes as the fire backed down the hill. Trees with higher canopies on the lower slopes were able to survive these backing fires. The

OLD FAIRVIEW WATERSHED

(Land Use Allocations & Forest Exclusions)



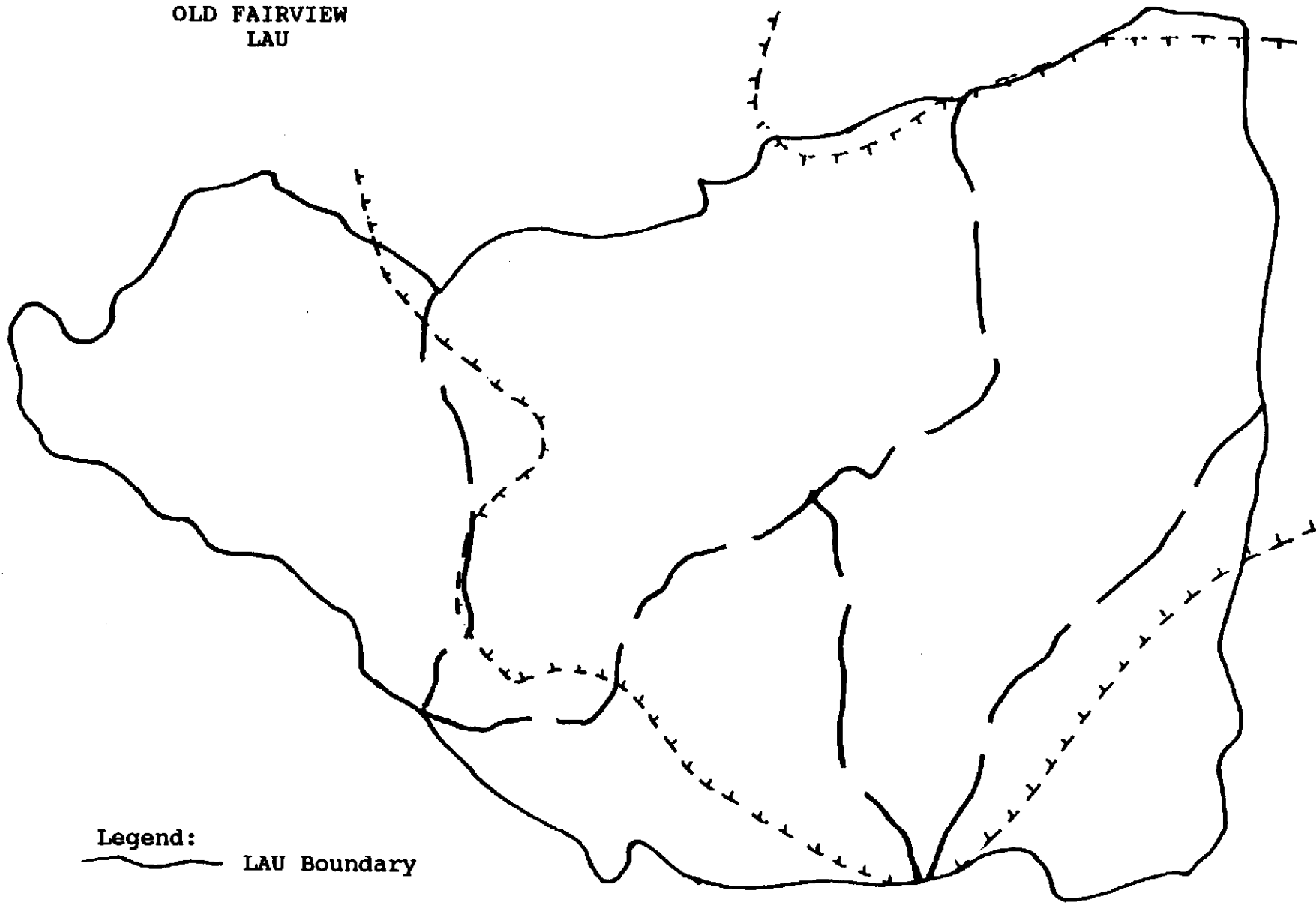
Wild & Scenic River

Other Exclusions
(Riparian Reserve, T&E Habitat,
Recreation Areas, Roads, TPCC)

Matix
Connectivity

GFMA

OLD FAIRVIEW
LAU



Legend:

— LAU Boundary

- - - Sub-Watershed Boundaries

- T - T - T - Fire Perimeter (1914)

F.F1

pockets of wetter northerly facing slopes may not have burned creating the diversity in stands on the lower slopes.

The fragmented vegetation patterns reflect the checkerboard ownership. Private owners have almost entirely cut over their lands while government has cut about 20 to 30% of the public lands. The more recent cutover lands both on private and public lands occur in the less accessible uplands. The second growth forests on private occur in the lower elevations. This probably reflects the progressive roading and logging toward the less accessible upper slopes throughout time.

The following figure V.F1 and table V.T1 show the overall vegetative patterns. There are 7 general age classes that represent habitat types for wildlife. These age classes tend to represent the age at which stands in this locality reach different seral stage conditions, as described in Wildlife Habitat Relationships in Oregon, Appendix A, by Brown, et. al. The use of this habitat relationship reference allows wildlife biologists to estimate the suitability of a given landscape for a species of wildlife based on the amount and distribution of seral stages used by that species. These age classes were also useful for analyzing hydrologic processes as well as opportunities for stand management.

III. CURRENT WATERSHED CONDITIONS RELATED TO MAJOR CONCERNS

A. Special Status Species

1. Northern Spotted Owl

All of the suitable habitat in the Old Fairview watershed has been surveyed to U.S. Fish and Wildlife protocol for the Northern spotted owl (6 times in 2 years). Core areas of approximately 100 acres have been identified around the 5 known Northern spotted owl sites in the watershed and reserved.

2. Other Special Status Species

The list of 33 species of concern below are suspected to occur within Old Fairview watershed. This table reflects the current knowledge about those species. These species have a great diversity of habitat needs. We have attempted to quantify the number of species needing habitat in each age class (see W.C3). A desired future condition may be to provide an equal percentage for each age class across the landscape to provide for habitat needs.

Special Status Species - Old Fairview Watershed

Species	Status	Presence	Inventory
Peregrine Falcon	FE, ST	D	4
Bald Eagle	FT, ST	D	3
Northern Spotted Owl	FT, ST	D	4
Western Pond Turtle	FC, SC	D	3
Cascades Frog	FC, AS, SC	U	1
Foothill Yellow-legged Frog	FC	U	1
Red-legged Frog, Oregon Species	BS	D	3
Spotted Frog	FC, SU	U	1
Northern Goshawk	FC, AS, SC	S	3

Pileated Woodpecker	AS, SC	D	3
Mountain Quail	FC	D	3
Western Bluebird	AS, SV	D	1
Northern Pygmy Owl	SU	D	3
Northern Saw-whet Owl	AS	D	3
Flammulated Owl	AS, SC	U	1
Purple Martin	AS, SV	U	1
Townsend's Big-eared Bat	FC, SC	S	2
Pacific Pallid Bat	AS, SC	S	2
Fringed Myotis Bat	BS, SV	S	2
Pine Martin	AS, SC	U	1
Ringtail	SU	U	1
Clouded Salamander	AS, SC	D	3
Tailed Frog	AS, SV	U	1
Oregon Slender Salamander	AS, SP	U	1
California Mountain Kingsnake	AS, SP	S	1
Common Kingsnake	AS, SP	D	2
Sharptailed Snake	AS, SV	D	3
Vertree's Ceratophan Caddisfly	FC	U	1
Vertree's Ochotrichian Microcaddisfly	FC	U	1
Mt. Hood Primitive Brachycentrid Caddisfly	FC	U	1
Fender's Blue Butterfly	FC	U	1
Oregon Snail	FC	U	1
Oregon pearly mussel	FC	U	1
Coho salmon	FP	D	3
Sea-run coastal cutthroat	FP	D	3
Winter steelhead	FP	D	3

Status:

FE - Federal Endangered
FT - Federal Threatened
FP - Federal Proposed
FC - Federal Candidate
BS - Bureau Sensitive
AS - Assessment Species (BLM)
SE - State Endangered
ST - State Threatened
SC - State Critical
SP - State Peripheral or naturally rare
SV - State Vulnerable
SU - State Undetermined

Presence:

D - Documented
S - Suspected
U - Uncertain
A - Absent

Inventory:

N - No surveys done
1 - Literature search only
2 - One field search done
3 - Limited field surveys done
4 - Protocol completed

OLD FAIRVIEW WATERSHED

(Age Classes)



V.F1

OLD FAIRVIEW WATERSHED AGE CLASSES (by acres, % Federal, & % Total Watershed)

Age Classes	SUB-WATERSHEDS											
	Clay Hill				Honey Creek				Hog Back			
	Federal Acres	% of Federal	Private Acres	% Total of Watershed	Federal Acres	% of Federal	Private Acres	% Total of Watershed	Federal Acres	% of Federal	Private Acres	% Total of Watershed
Forb (0-5 years)	131	14.0%	55	8.5%	95	4.9%	2	2.9%	28	5.2%	95	8.0%
Shrub (6-15 years)	50	5.3%	453	22.9%	84	4.4%	205	8.7%	0	0.0%	0	0.0%
Open Sap (16-25 years)	40	4.3%	518	25.4%	74	3.8%	467	16.2%	0	0.0%	9	0.6%
Closed Sap (26-75 years)	66	7.1%	148	9.7%	446	23.2%	766	36.3%	131	24.3%	832	63.0%
Saw Timber (76-120 yrs)	232	24.8%	57	13.1%	819	42.6%	0	24.5%	212	39.3%	53	17.3%
Young Old Growth (121-195 years)	117	12.5%	10	5.8%	81	4.2%	28	3.3%	20	3.7%	0	1.3%
Old Growth (195+)	300	32.1%	18	14.5%	324	16.8%	74	11.9%	149	27.6%	0	9.7%
TOTAL	936		1259		1923		1542		540		989	

TOTAL WATERSHED ACRES:

2198

3339

1529

Age Classes	SUB-WATERSHEDS								TOTAL WATERSHED			
	Susan Creek				Cole Creek							
	Federal Acres	% of Federal	Private Acres	% Total of Watershed	Federal Acres	% of Federal	Private Acres	% Total of Watershed	Federal Acres	% of Federal	Private Acres	% of Total by acres
Forb (0-5 years)	407	20.6%	11	12.8%	68	8.7%	34	8.1%	730	11.8%	196	8.0%
Shrub (6-15 years)	0	0.0%	390	11.9%	0	0.0%	12	1.0%	135	2.2%	1060	10.3%
Open Sap (16-25 years)	0	0.0%	134	4.1%	0	0.0%	0	0.0%	114	1.8%	1128	10.7%
Closed Sap (26-75 years)	172	8.7%	656	25.3%	137	17.5%	346	38.3%	952	15.4%	2739	31.8%
Saw Timber (76-120 yrs)	1021	51.6%	38	32.4%	335	42.7%	86	33.4%	2619	42.5%	235	24.6%
Young Old Growth (121-195 years)	146	7.4%	39	5.7%	157	20.0%	0	12.5%	522	8.5%	78	5.2%
Old Growth (195+)	231	11.7%	35	8.1%	87	11.1%	0	6.9%	1091	17.7%	127	10.5%
TOTAL	1977		1303		784		478		6163		5563	

TOTAL WATERSHED ACRES:

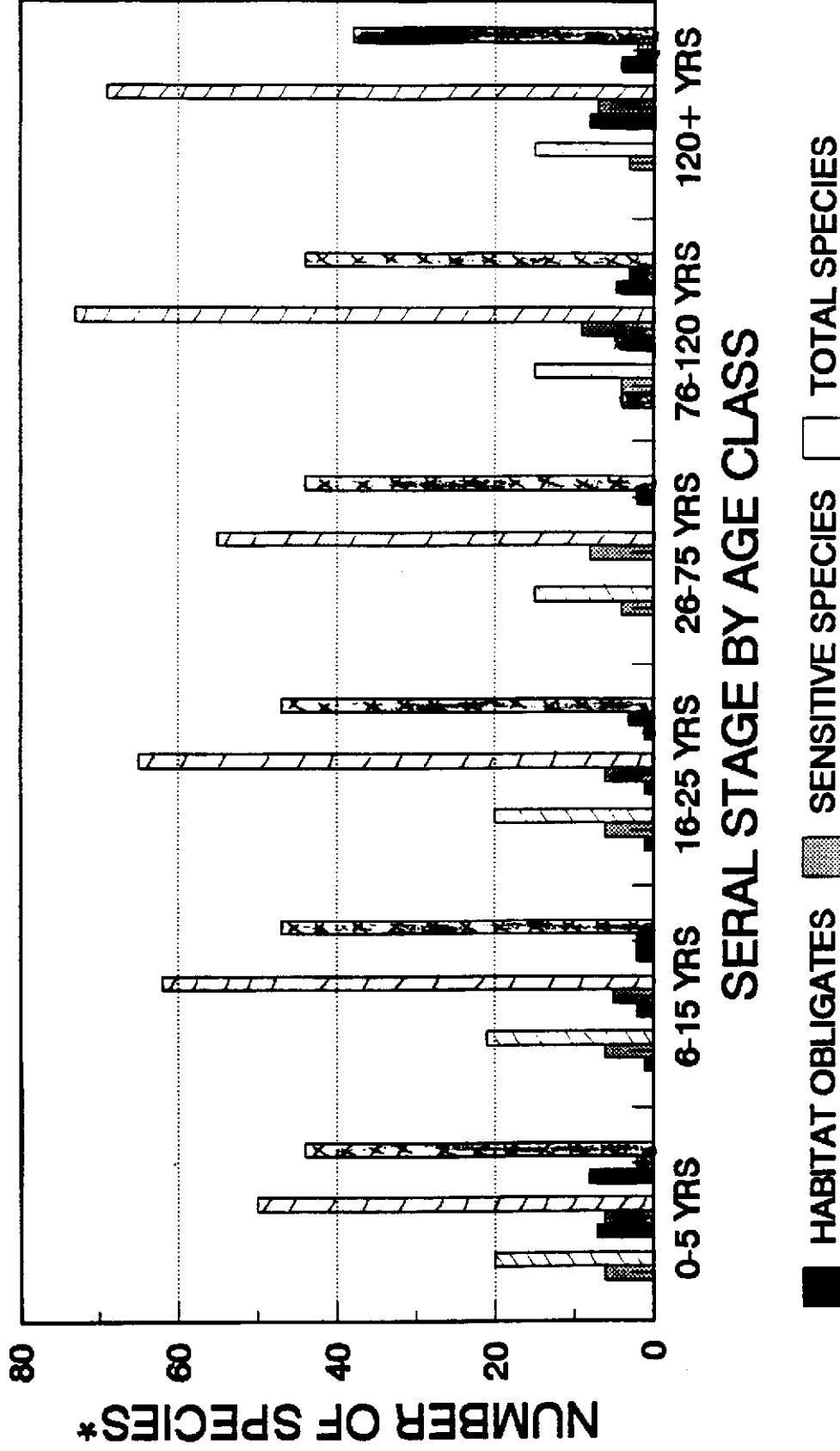
3272

1260

11598

SPECIES HABITAT USE BY SERAL STAGE

IN OLD FAIRVIEW LAU



*BAR CLUSTERS REPRESENT (L TO R)

HERPS, BIRDS, MAMMALS



3. Cavity Dweller Habitat

The ROD states that matrix lands administered by the BLM will be managed to maintain 40% of potential cavity dweller populations based on a forty acre analysis area. This population level may be supported by habitat that contains an average of 1.2 snags per acre, greater than 20" DBH, evenly distributed across the landscape. Recent reports from population studies on piliated woodpeckers suggests that this estimate of required snag density is low. This estimate also does not consider species that are insular-type species that require snags located in suitable forested habitat.

Analysis of the Old Fairview watershed was done on a compartment scale, rather than on each forty acres. Detailed analysis at this finer resolution will be necessary for project level recommendations. Assumptions were made for this analysis concerning the average number of snags per acre in various age classes based on rudimentary inventories in other watersheds and on cruise information done prior to timber sales. Without consideration of spatial arrangement or local variations in site history, the following are the estimated average number of snags per acre.

Clay/Hill	1.25 snags/acre
Honey Creek	.94 "
Hogback	.83 "
Susan Creek	.95 "
Cole Creek	1.10 "

Only one of these compartment watersheds, Clay/Hill, apparently meets the minimum snag density required to meet the objectives for management of cavity dweller habitat. Analysis on a smaller scale may seem to indicate that some forty acre parcels are above this minimum threshold, however, management must always be consistent with the larger perspective.

4. Data Gaps

More information is needed in the following areas for future iterations of watershed analysis:

- Initiate protocol, survey, and manage sensitive species [ROD, table C-3]
- Management plan for an Endangered species in the area
- 2 years of Goshawk surveys
- Surveys for other species (plant & animal)
- Local snag/down wood inventory

B. Fish/ Water Quality

The current available information about roads, landslides, and the amount of cutover lands give an indication as to how their conditions may influence fish and stream quality.

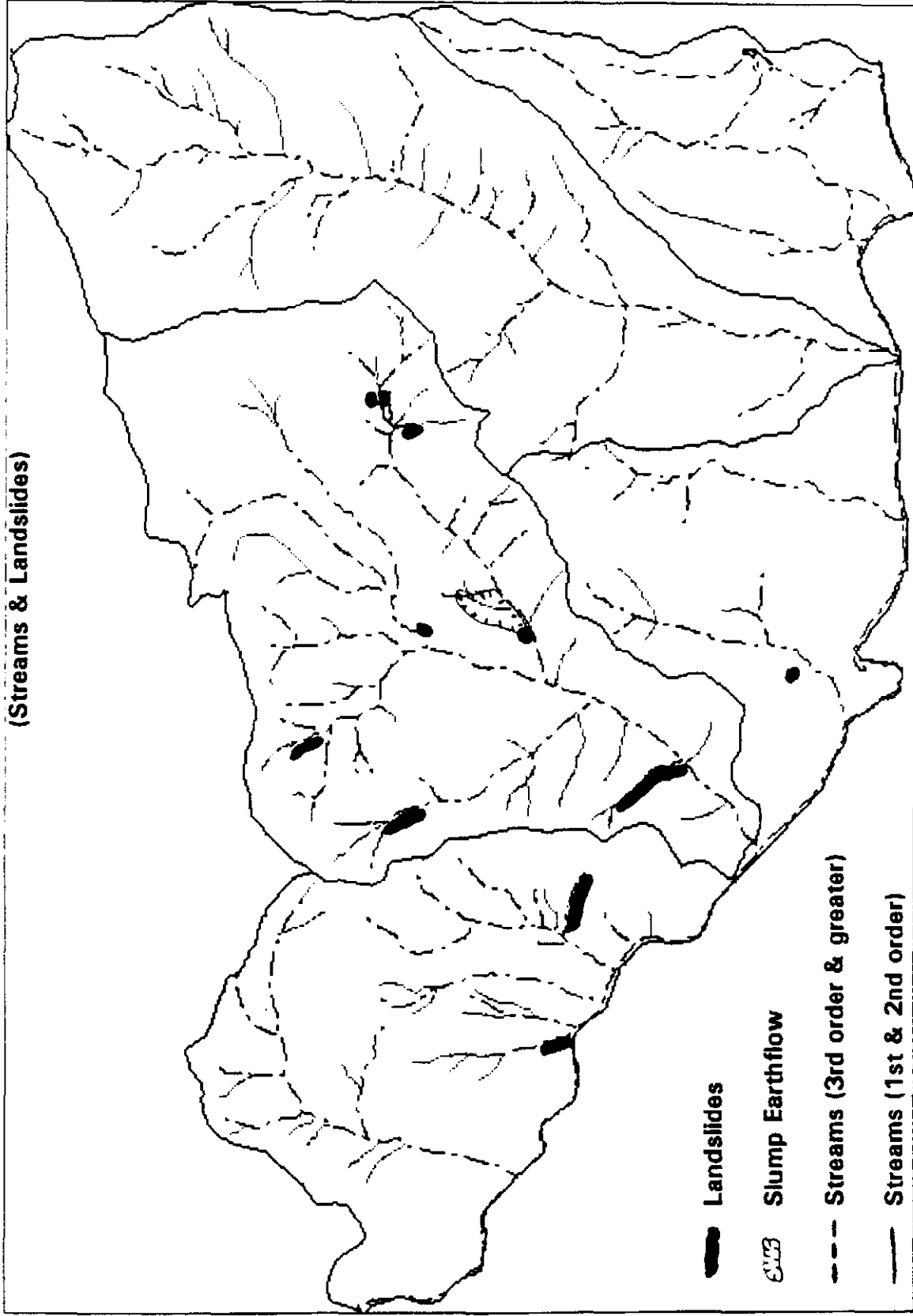
1. Stream Sedimentation from Erosion

Sediment caused from erosion can have major impacts on fish populations by clogging the spaces between the rocks where eggs are laid and suffocating the young. The amount of past sedimentation is unknown although it may have been higher than normal because of fire caused vegetation types as shown in the survey of 1914 (see figure F.F1).

Figure H.F1 shows the existing road system in Old Fairview as well as some of the major sources of sedimentation from landslides. Honey creek sub-watershed is impacted the most by these landslides. The large earthflow is a natural occurrence and is presumed to have caused sedimentation throughout history.

OLD FAIRVIEW WATERSHED

(Streams & Landslides)



H.F1

Roads have been and currently are a major source of sedimentation. There are approximately 82 miles of road in Old Fairview which covers about 4% of the total watershed area. The following figure (R.F1) and table (R.T1) shows a break down of the known road surface types and lengths. Generally unsurfaced roads that have not been revegetated create the greatest amount of erosion. The greatest length of known unsurfaced roads occur in Honey and Hog Back sub-watersheds. Surfacing on many of the roads is unknown because they exist on private lands. In most cases privately built roads were not surfaced for economic reasons. If it was assumed that most of the unknown roads have natural surfacing, then Honey and Susan creek would have the greatest lengths of unsurfaced roads. There are some roads as shown in figure R.F2 that dead-end in some type of reserve. There may be opportunities to change the maintenance or use of these roads to lower impacts to the watershed.

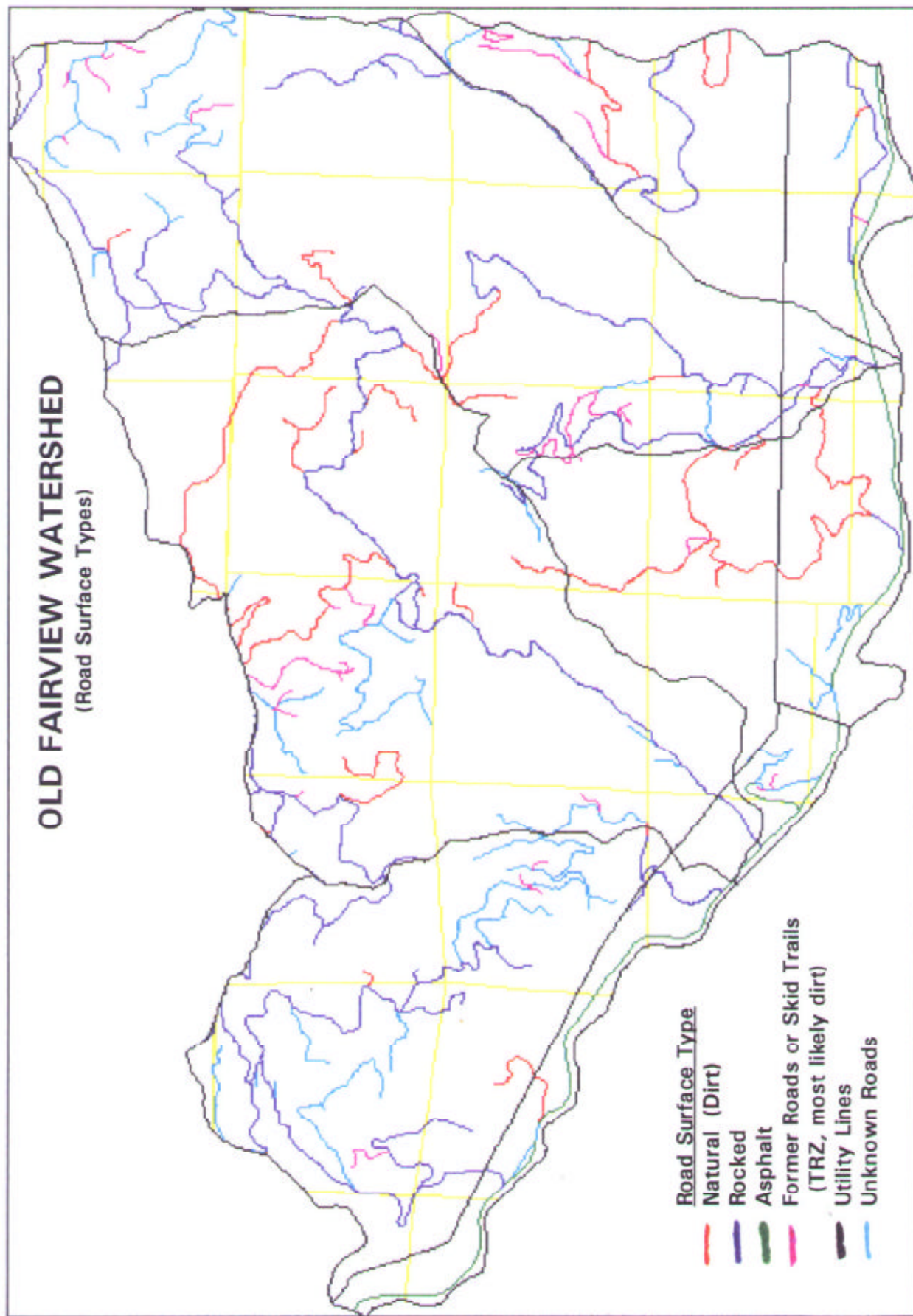
Most of the soils in Old Fairview are clayey or Loamy skeletal (contain > 35% rock fragments). Clay soils produce a fine mostly silt and clay sediment which settle out of water very slowly. Consequently fine sediment is transported longer distances down stream. Loamy skeletal soils produce a coarser mixture of sediment. Since Loamy skeletal soils are at least 35% rock fragments by volume they provide a source of gravel for streams. The Northeastern portion of the watershed has ashy soils. Ashy soils are highly erodable and produce silt to sand sized sediment. Ground based activities logging activities can compact the soils. Compaction can: 1)reduce soil productivity 2)reduce waterholding capacity (may increase capacity in sandy and ashy soils) 3)reduce infiltration and permeability which increases runoff 4)restrict root growth 5)and reduce soil aeration. Clayey soils are highly susceptible to compaction. During the period from 1964 to 1970 tractor logging seems to have been the most prevalent harvest method used at the lower elevations in Old Fairview watershed. From interpreting aerial photos from that era, it appears the lower portions of Honey creek and Hogback creek were used to skid logs.

Vegetation along streams can act as sediment traps when the larger trees fall into the stream. Vegetation older than 80 years of age generally provides the trees as structures of this type for stream channels. The most effective larger trees tend to be older than 80 years of age. Unfortunately large logs and trees were removed from streams during past land management practices. This is evident in Honey and Susan creeks. In Old Fairview 69% of the stream riparian areas have vegetation greater than 80 years of age as shown by the following table and figure H.F9.

SUB-WATERSHEDS	Vegetation Age < 80 Years Within Riparian Areas		Vegetation Age > 80 Years Within Riparian Areas	
	Acres	(%)	Acres	(%)
Clay-Hill	127	(33%)	251	(67%)
Honey	281	(36%)	485	(64%)
Hogback	44	(32%)	93	(68%)
Susan	100	(19%)	424	(81%)
Cole	87	(26%)	249	(74%)
Old Fairview (Total)	639	(31%)	1509	(69%)

OLD FAIRVIEW WATERSHED

(Road Surface Types)



R.F1

OLD FAIRVIEW WATERSHED ROADS (by miles, acres, & %)

	Clay Hill			Honey Creek			SUB-WATERSHEDS Hog Back			Susan Creek			Cole Creek		
	* Miles	Acres	% of Total by acres	Miles	Acres	% of Total by acres	Miles	Acres	% of Total by acres	Miles	Acres	% of Total by acres	Miles	Acres	% of Total by acres
Total Watershed Acres		11598			3339			1529			3272			1259	
Road Surface Types															
Asphalt	3.2	17	0.8%	0.0	0	0.0%	3.1	17	1.1%	0.1	1	0.0%	1.4	8	0.6%
Rock	8.4	51	2.3%	8.3	45	1.4%	0.7	4	0.3%	12.8	70	2.1%	3.3	18	1.4%
Natural (dirt)	0.8	4	0.2%	7.2	39	1.2%	4.1	22	1.5%	2.2	12	0.4%	1.7	9	0.7%
Former Roads or Skid Trails (TRZ's, most likely dirt)	0.5	3	0.1%	1.6	9	0.3%	0.4	2	0.1%	2.2	12	0.4%	1.3	7	0.6%
Unknown Roads	6.5	35	1.6%	4.3	23	0.7%	2.0	11	0.7%	4.4	24	0.7%	0.8	4	0.3%
TOTAL	20.3	111	5.0%	21.4	117	3.5%	10.4	57	3.7%	21.7	119	3.6%	8.5	46	3.7%
Utility Lines	2.9	69	3.2%	0.5	12	0.3%	2.1	52	3.4%	0.7	16	0.5%	1.2	30	2.3%

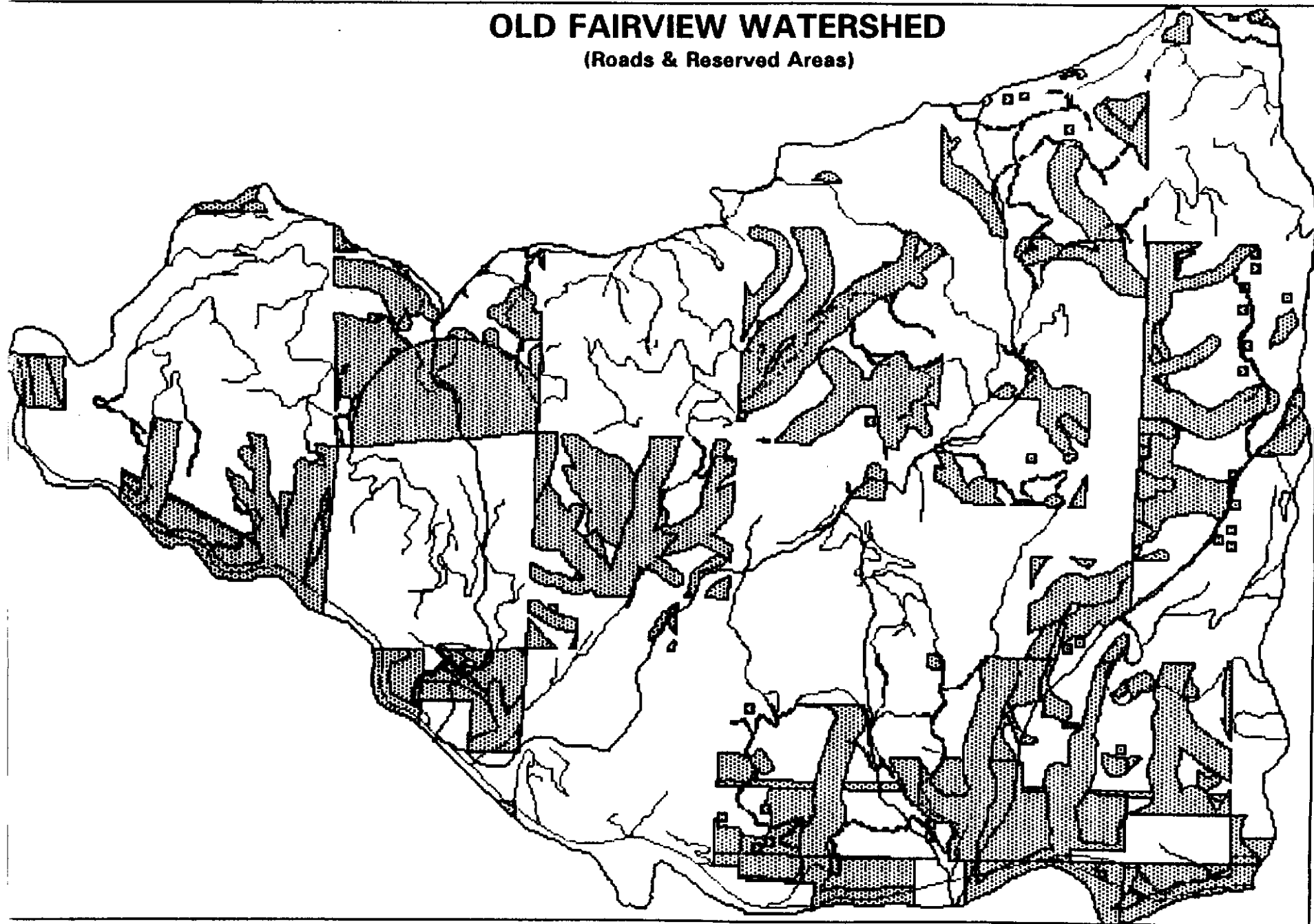
	Total Watershed		
	* Miles	Acres	% of Total by acres
Total Watershed Acres		11598	
Road Surface Types			
Asphalt	7.9	43	0.4%
Rock	34.5	188	1.6%
Natural (dirt)	16.0	87	0.8%
Former Roads or Skid Trails (TRZ's, most likely dirt)	6.1	33	0.3%
Unknown Roads	18.0	98	0.8%
TOTAL	82.4	450	3.9%
Utility Lines	7.4	178	1.5%

* Miles are in horizontal distances, not road surface distances.

R.T1

OLD FAIRVIEW WATERSHED

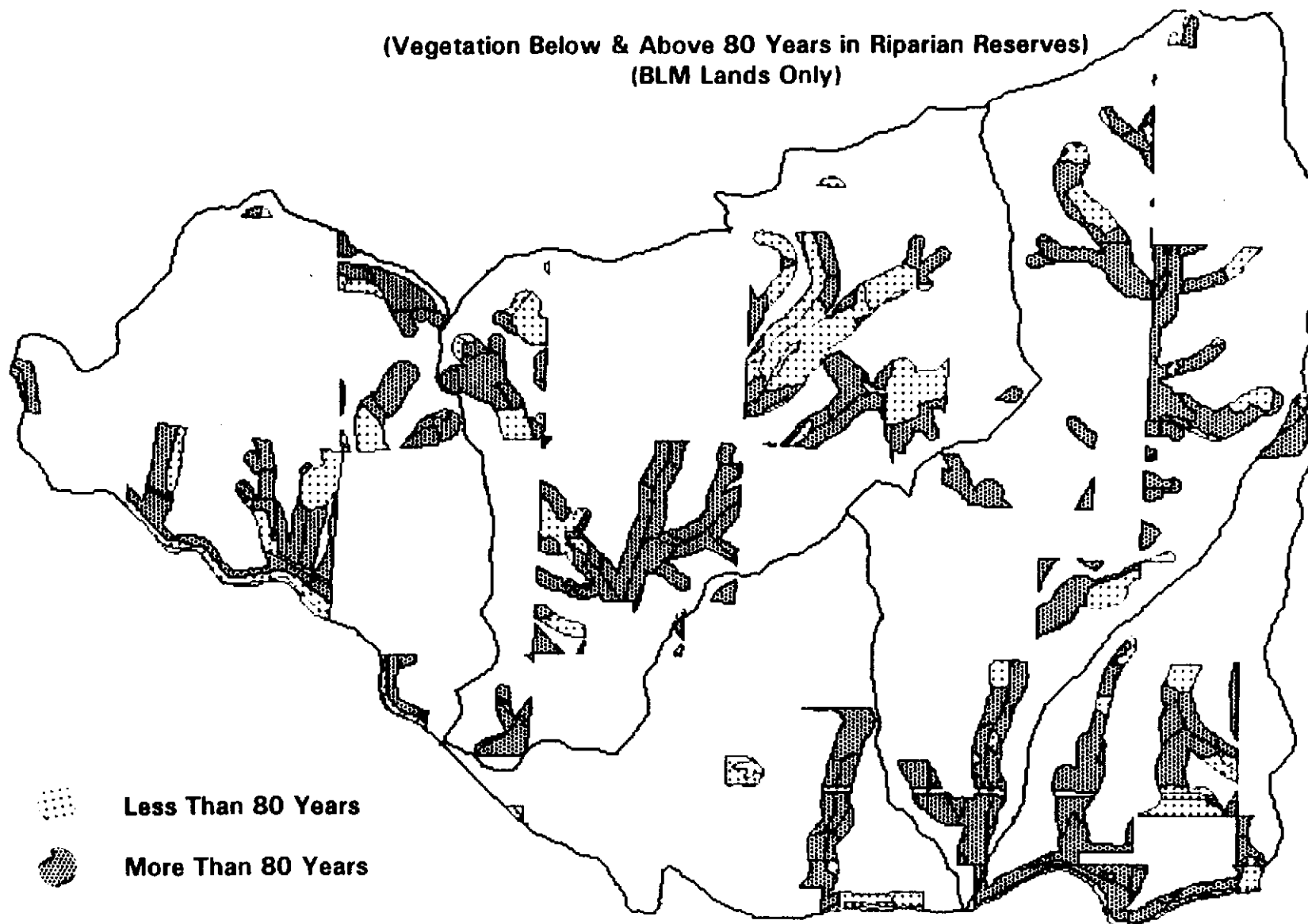
(Roads & Reserved Areas)



R.F2

OLD FAIRVIEW WATERSHED

(Vegetation Below & Above 80 Years in Riparian Reserves)
(BLM Lands Only)



H.F9

Vegetation 30 years and older is considered hydrologically recovered on the general landscape. The higher tree canopies of these stands intercept the rain and slow its velocity. During heavy rains there generally is less cutting of the stream banks in watersheds where most of the vegetation is greater than 30 years of age. This is a general principle and depends on other factors such as soil types and steepness of slopes. Old Fairview has 69 % of the watershed with forests greater than 30 years of age as shown by the following table and figure H.F4. Clay-Hill sub-watershed has had the greatest impact from clearcutting with 56% of its forests less than 30 years of age. Hog Back and Cole creek sub-watersheds have the most lands in a recovered state and probably provide the best opportunity for a Regeneration Harvest. Clay-Hill, Hogback, Honey, and Susan creek sub-watersheds probably all have needs for in-stream work and erosion control.

SUB-WATERSHEDS	Vegetation Age < 30 Years Acres (%)	Vegetation Age > 30 Years Acres (%)
Clay-Hill	1295 (59%)	904 (31%)
Honey	1055 (32%)	2284 (68%)
Hogback	132 (9%)	1397 (91%)
Susan	1001 (31%)	2271 (69%)
Cole	101 (8%)	1159 (92%)
Old Fairview (Total)	3590 (31%)	8008 (69%)

2. Data Gaps

There is quite a bit of information that is unknown about the stream and fish conditions in this watershed. More information is needed in the following areas for future iterations of watershed analysis:

- Limits of all fish distribution in stream
- Stream habitat inventory
- Stream temperature data
- Peak flows, Base flows
- Turbidity
- Channel condition
- Impact of water supply by domestic water use

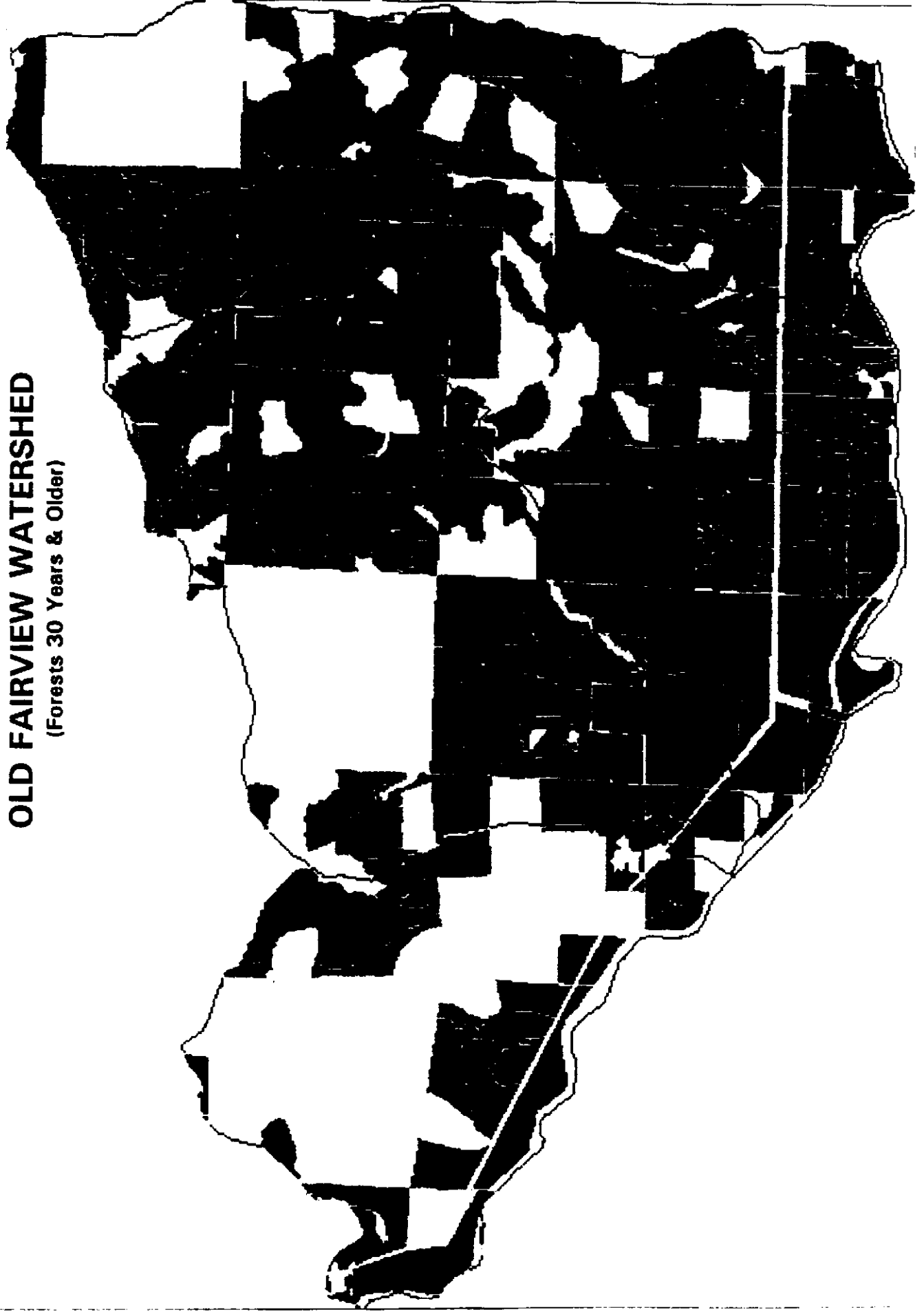
C. Socio-Economic Concerns

In this watershed extraction of timber production has greatly increased over the last 50 years. This has provided valuable wood products for the market. More recently this area has received national attention because of the beauty of the North Umpqua river and its designation as a Wild and Scenic River. Areas along the river were designated by an act of Congress and is currently under a Wild and Scenic River Management Plan. Besides fishing and river recreation, the main recreation sites within Old Fairview watershed include a campground, picnic area, and falls trail in the Susan creek compartment. The 5 outstandingly remarkable values which guide the North Umpqua Wild & Scenic River plan include: 1) Recreation 2) Fisheries 3) Water quality and quantity 4) Scenery and 5) Cultural sites.

This watershed with its land designations is designed to provide both timber commodities to the market as well as the recreation and scenic values of the river.

OLD FAIRVIEW WATERSHED

(Forests 30 Years & Older)



H.F4

D. Noxious Weeds

Although inventories of specific weed locations is still ongoing, the presence of noxious weeds has been documented in this watershed. The major weed infestation in Old Fairview is Scotch Broom with minor infestations of Tansy Ragwort and St. John's wort. Douglas County has a high priority in controlling Distaff Thistle, however none has been located in this watershed. Scotch Broom has mostly been found along roads and especially along the powerline. Because it has spread so widely, Douglas County has placed its control on a low priority. All of these weeds have the potential of spreading very quickly and overtaking native vegetation.

IV. DESIRED FUTURE CONDITIONS

The following objectives were developed under each of the Main Management Concerns. These may change with next iteration of watershed analysis:

A. Special Status Species

- Maintain sufficient amounts of different vegetative age classes as habitat for the 33 species of concern on the overall watershed.
- Maintain/create connectivity by minimizing edge contrast;
 - between like age classes
 - between adjacent watersheds
- Maintain minimum blocks for special status species.
- Maintain sufficient cavity nester habitat. [ROD, pg C-42(d)]

B. Fisheries/Water Quality

- Reduce sediment loading because of Wild & Scenic River, domestic water users, beneficial uses and fish. (particularly in Susan & Honey Creek)
- Provide more large woody debris within stream channels.
- Create/Accelerate older stand structure in Riparian Reserve Areas.
- Maintain Equivalent Clearcut Area(ECA= stands < 30 years of age) by compartment watershed at or below 25 to 30%.
- Minimize and reduce impacts of roads on hydrologic function and routing of water.

C. Socio-Economic Issues

- Desire partnership with private landowners.
- Provide commodities for local markets
- Provide employment opportunities
- Maintain scenic qualities in accordance with Wild & Scenic river plan and Visual classifications.

D. Noxious Weeds

- Limit their spread and distribution

V. FUTURE OPPORTUNITIES

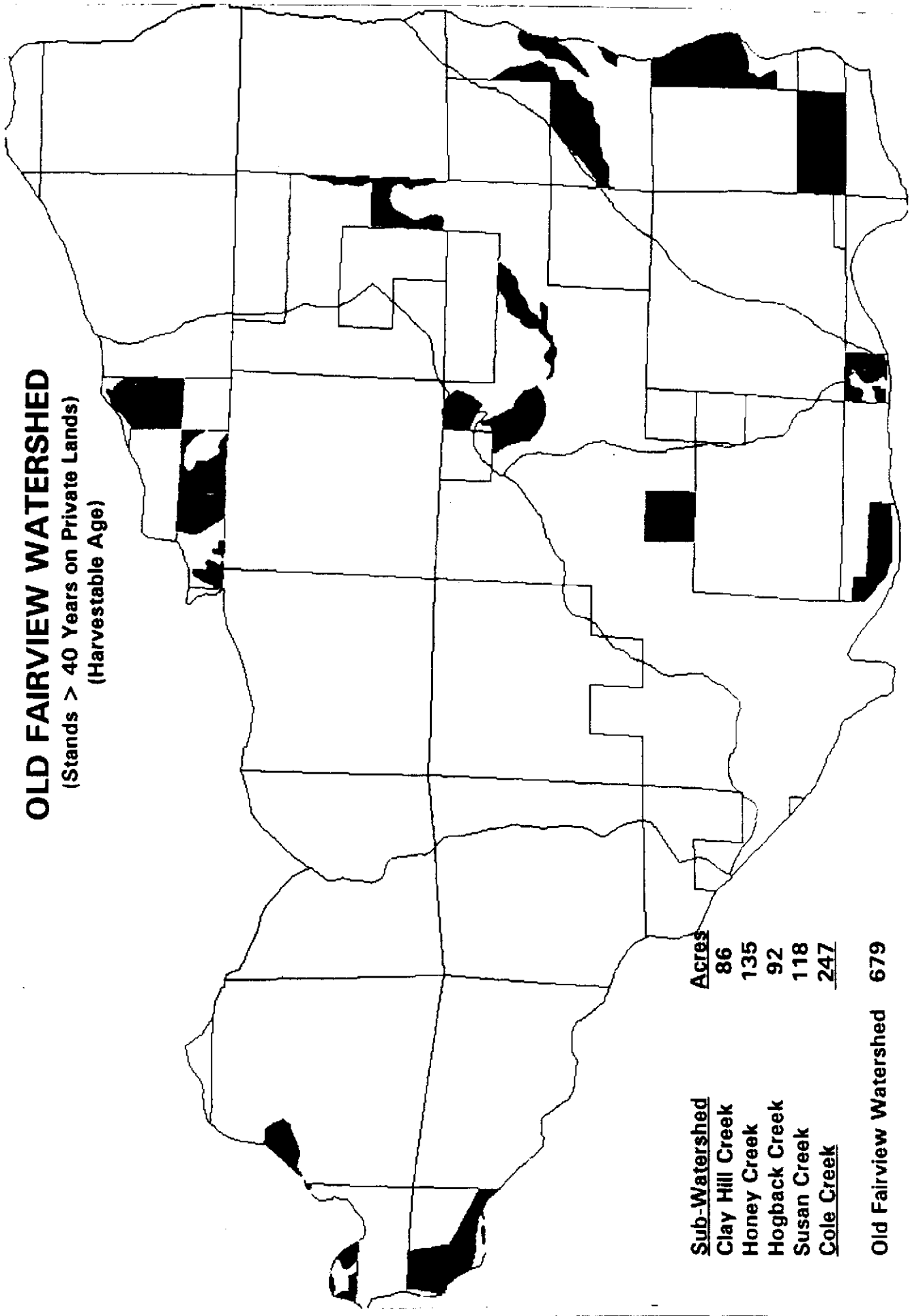
Approximately 5% of the forests in this watershed on private lands are over 40 years of age as shown in figure H.F8. It is expected that most of these forests will be harvested within the next 20 years. As this occurs the currently younger age classes will move into the older age classes. The cutting both on private and public lands may tend to keep a balance of all age classes during this time period.

The opportunities listed below should be designed to meet the desired future condition objectives. Project

OLD FAIRVIEW WATERSHED

(Stands > 40 Years on Private Lands)

(Harvestable Age)



<u>Sub-Watershed</u>	<u>Acres</u>
Clay Hill Creek	86
Honey Creek	135
Hogback Creek	92
Susan Creek	118
<u>Cole Creek</u>	<u>247</u>

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details and locations would be addressed in an environmental assessment. The opportunities listed below are in priority in accordance with the ROD watershed restoration priorities [ROD, pg B-31].

OPPORTUNITIES/PROJECTS POTENTIALLY RESULTING FROM THE ANALYSIS

- Identify and decommission severely eroding and non-useful roads
- Erosion control and maintenance of existing roads
- Stream Restoration Projects
 - Increase large woody debris in Susan and Honey creek
- Thinning/Manipulation to increase tree structures along streams
- Commercial Thinnings to accelerate younger forests toward older stand structures
- Regeneration Harvests
- Management plan for a Threatened species in Old Fairview watershed
 - land acquisition for species site use
- Manipulating stands to create required cavity nester habitat

VI. PUBLIC PARTICIPATION

Since this was one of the first watershed analyses for the Roseburg district, the public was involved extensively. Private landowners were first contacted and shown some of the preliminary data. We also sent out a news release inviting public participation and conducted a public meeting. These have all been documented in the loose leaf notebook. Private landowners expressed their concern was how their lands would be portrayed and how this process might be used to constrain activities on private lands.